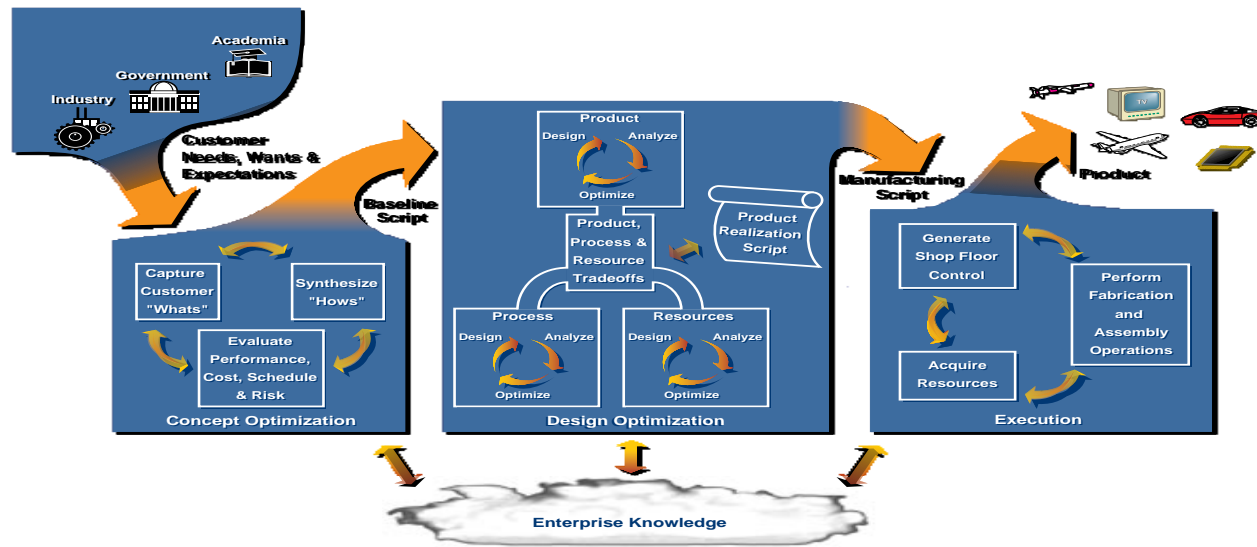


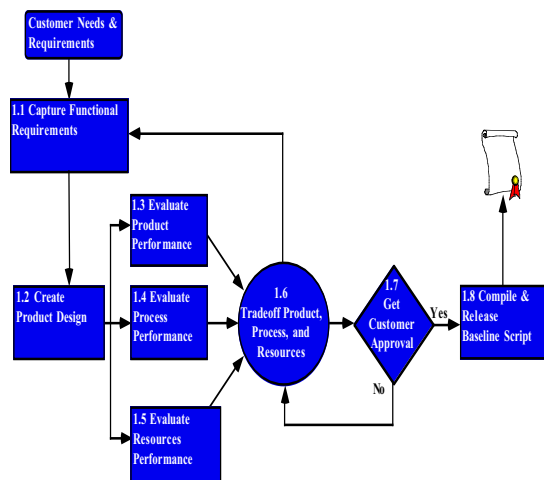
Material Removal Enterprise Model

- **What**
 - Developed an enterprise model of the global distributed TEAM material removal product realization process
- **Why**
 - Identify opportunities for critical process improvement
 - Analyze process flowtime constraints
- **How**
 - Developed heierarchical model with **Extend**
 - Performed simulation of activities and information flow
 - » Connectivity and dependency of tasks
 - » Flow of information
 - » Duration of events
 - Documented results

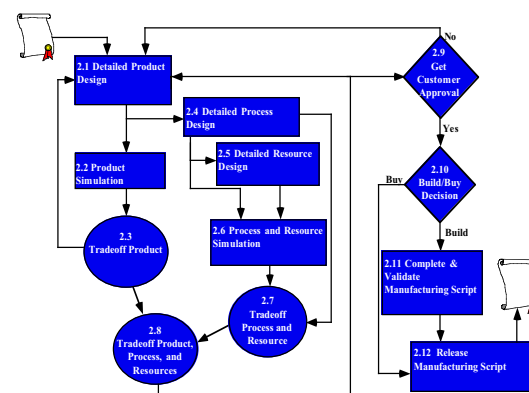
Enterprise Model Includes Entire Product Realization Process



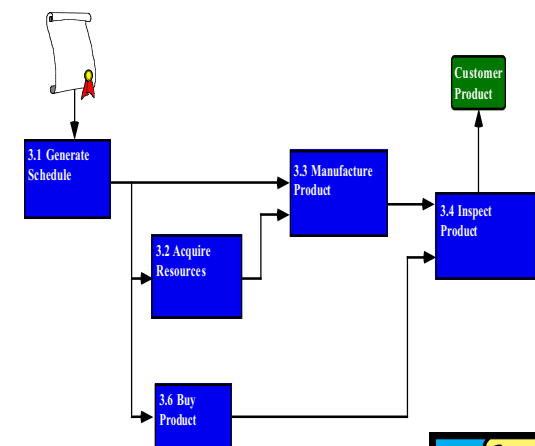
Concept Optimization



Design Optimization



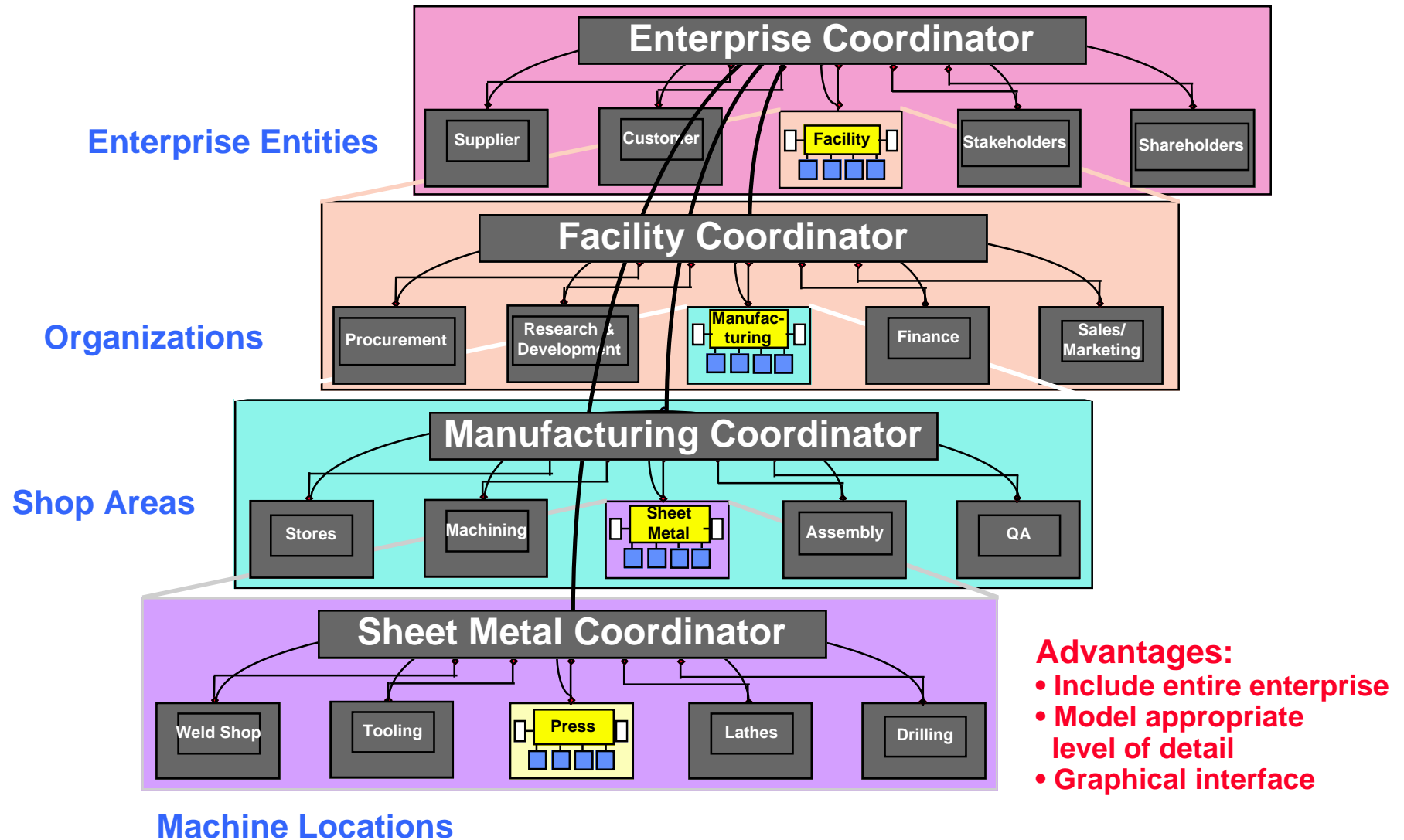
Execution



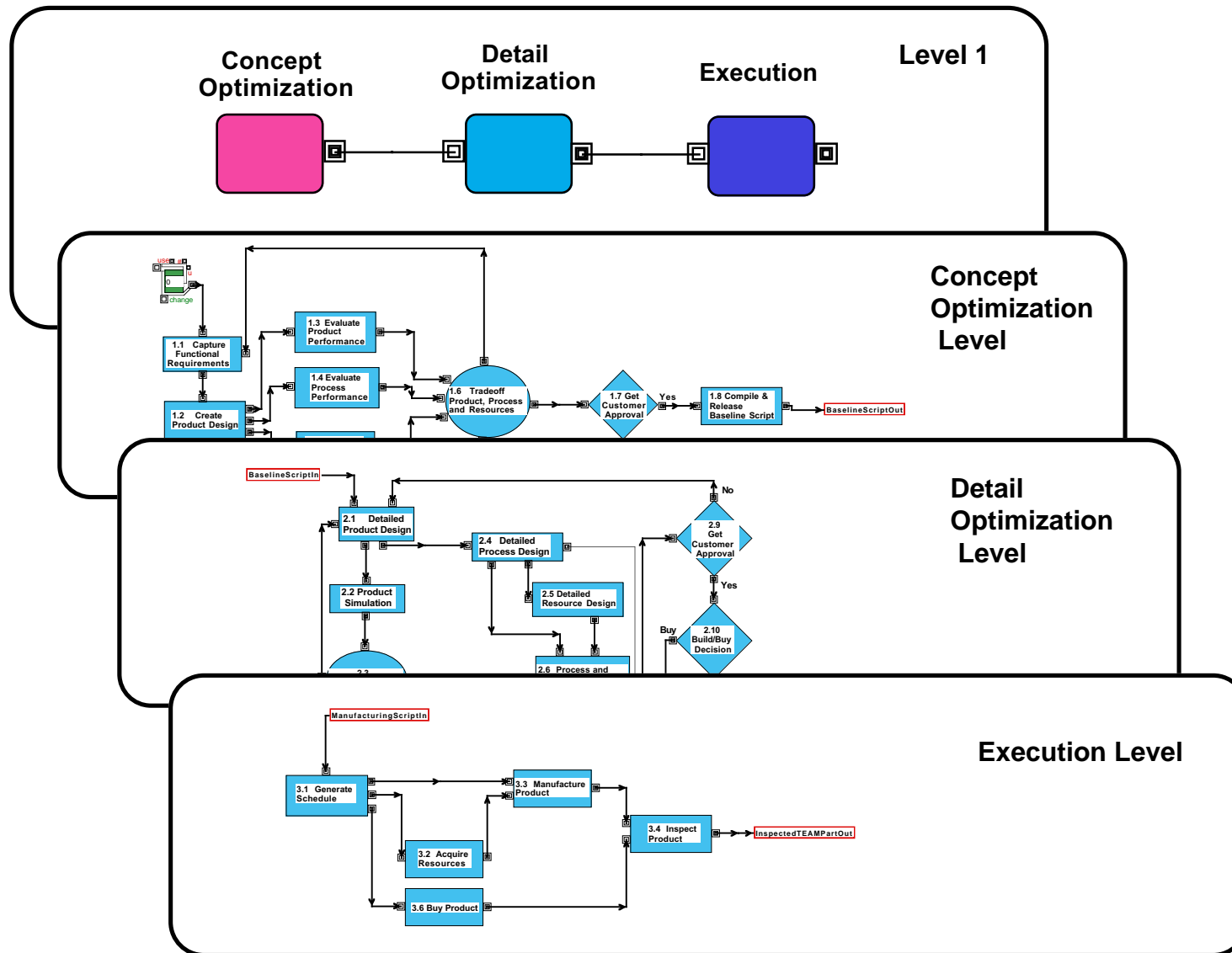
Virtual Manufacturing Enterprise Modeling



Hierarchical Structure is Used for Enterprise Modeling



Hierarchy of Material Removal Product Realization Model



Enterprise Model Applications

- **Comparatively assess and measure the effectiveness of various operational configurations relative to the TEAM mission**
- **Mission: Streamline product development by deploying integrated, validated product realization tools and processes utilizing distributed resources in a “virtual” enterprise**
- **Metrics**
 - Total time
 - Utilization by process
 - Cost